AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.-22. (Canceled)

23. (New) A method for determining an angular position of a rotor of an electric motor, said rotor having a defined number of pole pairs, the method comprising the steps of:

applying to at least one stator winding of the electric motor an electric current having a predetermined pulse pattern and a predetermined pulse duration, said electric current causing the rotor to rotate during the pulse duration by no more than 90° divided by the number of pole pairs,

measuring an angular acceleration of the rotor, and

determining the angular position of the rotor from a relationship between the electric current and the angular acceleration.

24. (New) The method of claim 23, wherein the angular acceleration is measured by measuring a variable which only dependent on the angular acceleration, without determination of an incremental rotor position and a speed of the rotor.

25. (New) The method of claim 23, wherein the electric current applied to the at least one stator winding includes a current-flow pattern of linearly independent current components.

26. (New) The method of claim 23, wherein the rotor rotates by no more than 2° during the pulse duration..

27. (New) The method of claim 23, wherein the rotor is stationary before the angular position is determined.

28. (New) The method of claim 23, wherein the rotor is rotating when the angular position is determined.

29. (New) The method of claim 25, wherein the current components of the pulse pattern have current-flow patterns with a time offset within the predetermined pulse duration.

30. (New) The method of claim 29, wherein the current components flowing through the at least one stator winding include two current components which are mutually orthogonal.

31. (New) The method of claim 30, wherein the current-flow patterns of the two current components are identical.

32. (New) The method of claim 29, wherein a current-flow pattern has a first current-flow phase with a non-zero current component and a second current-flow phase with a zero current component.

33. (New) The method of claim 32, wherein a current-flow phase of one of the current components of the current-flow pattern is located within a zero-current current-flow phase of another current component of the same pulse pattern.

34. (New) The method of claim 25, wherein two current components of the pulse pattern are synchronous, but have different current-flow patterns.

35. (New) The method of claim 24, wherein a current-flow pattern includes different sections, wherein the current component has a different mathematical sign in the different section, without causing a permanent change in the angular position.

36. (New) The method of claim 35, wherein a current-flow pattern includes a central section where the current component has a first mathematical sign, and respective edge sections located before and after the central section where the current component has the opposite mathematical sign.

37. (New) The method of claim 36, wherein a magnitude of a maximum current of the current component in the central section is identical to a magnitude of a maximum current in the edge sections.

38. (New) The method of claim 37, wherein the edge sections each have an identical time duration, and wherein this time duration is one half of a time duration of the central section.

39. (New) The method of claim 23, wherein the pulse pattern repeats periodically.

40. (New) The method of claim 23, wherein the pulse pattern comprises a square-wave pulse.

41. (New) The method of claim 23, wherein the pulse pattern has a sinusoidal current profile.

42. (New) An apparatus for determining an angular position of a rotor of an electric motor, said rotor having a defined number of pole pairs, the apparatus comprising:

at least one stator winding receiving an electric current with a pulse pattern having a predetermined pulse duration, said electric current causing the rotor to rotate during the pulse duration by no more than 90° divided by the number of pole pairs,

an acceleration sensor adapted to record an angular acceleration of the rotor caused by the electric current passing through the stator windings, and

an evaluation unit cooperating with the at least one stator winding and with the acceleration sensor, said evaluation unit determining the angular position of the rotor from a relationship between the electric current and the angular acceleration.

43. (New) The apparatus of claim 42, wherein the acceleration sensor comprises a Ferraris sensor.

44. (New) The apparatus of claim 42, wherein the rotor is implemented as a permanent-magnet rotor.